

**MAIL TO:**

STATE OF UTAH  
DIVISION OF PURCHASING  
3150 STATE OFFICE BUILDING, CAPITOL HILL  
P.O. BOX 141061  
SALT LAKE CITY, UTAH 84114-1061  
TELEPHONE (801) 538-3026  
<http://www.purchasing.state.ut.us>

**Invitation to Bid**Solicitation Number: **JG3070**Due Date: **10/29/02 2:00PM**Date Sent: **October 10, 2002**Goods and services to be purchased: **AUTOMATED VEHICLE LOCATION SYSTEM****Please complete**

Company Name		Federal Tax Identification Number	
Ordering Address	City	State	Zip Code
Remittance Address (if different from ordering address)	City	State	Zip Code
Type <input type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Proprietorship <input type="checkbox"/> Government	Company Contact Person		
Telephone Number (include area code)	Fax Number (include area code)		
Company's Internet Web Address	Email Address		
Discount Terms (for bid purposes, bid discounts less than 30 days will not be considered)	Days Required for Delivery After Receipt of Order (see attached for any required minimums)		
<p>The following documents are included in this solicitation: Solicitation forms, instructions and general provisions, and specifications. <u>Please review all documents carefully before completing.</u></p> <p>The undersigned certifies that the goods or services offered are produced, mined, grown, manufactured, or performed in Utah. Yes_____ No_____. If no, enter where produced, etc._____</p>			
Offeror's Authorized Representative's Signature		Date	
Type or Print Name		Position or Title	

**STATE OF UTAH  
DIVISION OF PURCHASING  
GENERAL SERVICES**

**Invitation to Bid**

Solicitation Number: JG3070

Due Date: 10/29/02 2:00PM

**Vendor Name:**

Item#	Qty	Unit	Description	Unit Price	Extension
1	1	EACH	BID TO PROVIDE UDOT REGION 3 (UTAH AND WASATCH COUNTIES) WITH AN AUTOMATED VEHICLE LOCATION SYSTEM PER ATTACHED SPECIFICATIONS.  THIS IS AN INVITATION TO BID, THEREFORE YOU MAY EITHER HAND DELIVER OR MAIL IN YOUR BID RESPONSE. BID RESPONSES THAT ARE FAXED IN WILL <b>NOT</b> BE CONSIDERED.	\$	\$

FOR QUESTIONS AND/OR CLARIFICATIONS PLEASE CONTACT DEBRA BOULTON AT (801) 965-4070 OR [DBOULTON@UTAH.GOV](mailto:DBOULTON@UTAH.GOV)

FOR BID PROCESSING QUESTIONS PLEASE CONTACT JARED GARNDER AT (801) 538-3342 OR [JAREDGARDNER@UTAH.GOV](mailto:JAREDGARDNER@UTAH.GOV)

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REF RX# 810 36/74

**Ship To:** DEPARTMENT OF TRANSPORTATION  
REGION 3  
658 N. 1500 W.  
OREM, UT 84057

**FREIGHT CHARGES (if applicable)**

SHIPPING POINT AND ZIP CODE	
SHIPPING WEIGHT	
MODE OF TRANSPORTATION (Please check one)  Q Small package/Ground      Q LTL(Less than truck load)      Q Truckload      Q Air      Q Other (Please specify) NMFC Class # _____ NMFC Item # _____	
TOTAL PRICE LESS FREIGHT (FOB Origin)	\$
TOTAL PRICE INCLUDING FREIGHT (FOB Destination)	\$

## INVITATION TO BID - INSTRUCTION AND GENERAL PROVISIONS

1. **BID PREPARATION:** (a) All prices and notations must be in ink or typewritten. (b) Price each item separately. Unit price shall be shown and a total price shall be entered for each item bid. (c) Unit price will govern, if there is an error in the extension. (d) Delivery time is critical and must be adhered to as bid. (e) Wherever in this document an item is defined by using a trade name of a manufacturer and/or model number, it is intended that the words, "or approved equal" apply. "Or approved equal" means any other brand that is equal in use, quality, economy and performance to the brand listed as determined by the Division of Purchasing & General Services (DIVISION). If the bidder lists a trade name and/or catalog number in the bid, the DIVISION will assume the item meets the specifications unless the bid clearly states it is an alternate, and describes specifically how it differs from the item specified. **MULTIPLE OR ALTERNATE BIDS WILL NOT BE ACCEPTED UNLESS SO STATED IN THE SPECIFICATIONS.** (f) By signing the bid the bidder certifies that all of the information provided is accurate, and that prices bid are correct. (g) This bid may not be withdrawn for a period of 60 days from bid due date.

2. **SUBMITTING THE BID:** (a) The bid must be signed in ink, sealed in a properly-addressed envelope, and either mailed or delivered to the DIVISION OF PURCHASING, 3150 State Office Building, Capitol Hill, Salt Lake City, UT 84114-1061 by the "Due Date and Time." **The "Bid Number" and "Due Date" must appear on the outside of the envelope.** (b) Bids, modifications, or corrections received after the closing time on the "Due Date" will be considered late and handled in accordance with the Utah Procurement Rules, section R33-3-109. (c) **Your bid will be considered only if it is submitted on the forms provided by the state. Facsimile transmission of bids to DIVISION will not be considered.** (d) All prices quoted must be both F.O.B. Origin per paragraph 1.(c) and F.O.B. Destination. Additional charges including but not limited to delivery, drayage, express, parcel post, packing, cartage, insurance, license fees, permits, costs of bonds, or for any other purpose must be included in the bid for consideration and approval by the DIVISION. Upon award of the contract, the shipping terms will be F.O.B. Destination, Freight Prepaid with freight charges to be added to the invoice unless otherwise specified by the DIVISION. (e) All State purchases are subject to the Utah Procurement Code, Title 63, Chapter 56 Utah Code Annotated 1953, as amended, and the Procurement Rules as adopted by the Utah State Procurement Policy Board (Utah Administrative Code Section R33).

3. **FAILURE TO BID:** Failure to respond may result in the removal of your firm from the bidder's list for the commodity(s) listed, unless you advise DIVISION in writing prior to due date that you desire to receive future invitations to bid on this commodity(s). **Three consecutive no responses will automatically result in removal.**

4. **PROPRIETARY INFORMATION:** Suppliers are required to mark any specific information contained in their bid which is not to be disclosed to the public or used for purposes other than the evaluation of the bid. Each request for nondisclosure must be accompanied by a specific justification explaining why the information is to be protected. Pricing and service elements of any bid will not to be considered proprietary. Bids submitted may to be reviewed and evaluated by any persons at the discretion of the state.

5. **BONDS:** The state has the right to require a bid bond, payment bond and/or a faithful performance bond from the bidder in an amount not to exceed the amount of the contract.

6. **SAMPLES:** Samples of item(s) specified in this bid, when required by DIVISION, must to be furnished free of charge to DIVISION. Any item not destroyed by tests may, upon request made at the time the sample is furnished, to be returned at the bidder's expense.

7. **WARRANTY:** The contractor agrees to warrant and assume responsibility for all products (including hardware, firmware, and/or software products) that it licenses, contracts, or sells to the State of Utah under this contract for a period of one year, unless otherwise specified and

mutually agreed upon elsewhere in this contract. The contractor (seller) acknowledges that all warranties granted to the buyer by the Uniform Commercial Code of the State of Utah applies to this contract. Product liability disclaimers and/or warranty disclaimers from the seller are not applicable to this contract unless otherwise specified and mutually agreed upon elsewhere in this contract. In general, the contractor warrants that: (1) the product will do what the salesperson said it would do, (2) the product will live up to all specific claims that the manufacturer makes in their advertisements, (3) the product will be suitable for the ordinary purposes for which such product is used, (4) the product will be suitable for any special purposes that the State has relied on the contractor's skill or judgement to consider when it advised the State about the product, (5) the product has been properly designed and manufactured, and (6) the product is free of significant defects or unusual problems about which the State has not been warned. Remedies available to the State include the following: The contractor will repair or replace (at no charge to the State) the product whose nonconformance is discovered and made known to the contractor in writing. If the repaired and/or replaced product proves to be inadequate, or fails of its essential purpose, the contractor will refund the full amount of any payments that have been made. Nothing in this warranty will be construed to limit any rights or remedies the State of Utah may otherwise have under this contract.

8. **DIVISION APPROVAL:** Purchase orders placed, or contracts written, with the state of Utah, as a result of this bid, will not to be legally binding without the written approval of the director of the DIVISION.

9. **AWARD OF CONTRACT:** (a) the contract will to be awarded with reasonable promptness, by written notice, to the lowest responsible bidder that meets the specifications. Consideration will to be given to the quality of the product(s) to be supplied, conformity to the specifications, the purpose for which required, delivery time required, discount terms and other criteria set forth in this invitation to bid. (b) The bids are opened publicly in the presence of one or more witnesses. the name of each bidder, and the amount of the bid is recorded. Each bid, and the record, is open to public inspection. (c) The DIVISION may accept any item or group of items, or overall low bid. the DIVISION has the right to cancel this invitation to bid at any time prior to the award of contract. (d) The DIVISION can reject any and all bids. And it can waive any informality, or technicality in any bid received, if the DIVISION believes it would serve the best interest of the State. (e) Before, or after, the award of a contract the DIVISION has the right to inspect the bidder's premises and all business records to determine the holder's ability to meet contract requirements. (f) DIVISION does not guarantee to make any purchase under awarded contract(s). Estimated quantities are for bidding purposes only, and not to be interpreted as a guarantee to purchase any amount. (g) Utah has a reciprocal preference law which will to be applied against bidders bidding products or services produced in states which discriminate against Utah products. For details see Section 63-56 20.5 -20.6, Utah Code Annotated.

10. **ANTI-DISCRIMINATION ACT:** The bidder agrees to abide by the provisions of the Utah Anti-discrimination Act, Title 34 Chapter 35, U.C.A. 1953, as amended, and Title VI and Title VII of the Civil Rights Act of 1964 (42 USC 2000e), which prohibit discrimination against any employee or applicant for employment, or any applicant or recipient of services, on the basis of race, religion, color, or national origin; and further agrees to abide by Executive Order No. 11246, as amended, which prohibits discrimination on the basis of sex; 45 CFR 90 which prohibits discrimination on the basis of age, and Section 504 of the Rehabilitation Act of 1973 or the Americans with Disabilities Act of 1990, which prohibits discrimination on the basis of disabilities. Also bidder agrees to abide by Utah's Executive Order, dated March 17, 1993, which prohibits sexual harassment in the workplace. Vendor must include this provision in every subcontract or purchase order relating to purchases by the State of Utah to insure that the subcontractors and vendors are bound by this provision.

revision date: 2/14/2000

# **Automated Vehicle Location System**

## **PART 1                      GENERAL**

### **1.1      EQUIPMENT REQUIREMENTS**

- A.      Furnish all materials, components, communications equipment, and computer software for an automated vehicle location system that provides an accurate present location and shall record the vehicle location history using a personal computer.

### **1.2      OPERATING ENVIRONMENT**

- A        -50°F to +120°F
- B        All equipment is mounted inside truck or tractor cab.
- C        Remote environment - untethered solar panel operation capable as delivered.
- D        Systems are located on vehicles assigned to Strawberry, Provo Canyon, and Lehi Utah maintenance stations.
- E        Provide systems for 25 vehicles and 3 base stations in Utah and Wasatch County. Provide remote terminal access at UDOT Region 3 headquarters in Orem, Utah
- F        Base stations are located at Strawberry Maintenance Station, SR-40 MP 42; Provo Canyon Maintenance Station, SR-189 MP 12; and Lehi Maintenance Station, 1600 West State Street, Lehi, Utah. UDOT Region 3 is located at 658 North 1500 West, Orem
- G        Weather protected NEMA box .

### **1.3      SUBMITTALS**

- A        Communications Plan: Submit communications path with devices and rate structures for approval.
- B        Analog (15) communication lines to be activated through state approved vendor at state rate levels.

## **PART 2 PRODUCTS**

### **2.1 AUTOMATED VEHICLE LOCATION SYSTEM**

- A Geographic positioning satellite receiver antenna, and housing:
  - 1. Interior mount antenna.
  - 2. Tamper-proof housing.
- B Messaging Keyboard and Display unit.
- C Store 800 way points while awaiting downloading.
- D 7dB gain roof-mounted antenna.
  - 1. Express product model 105-7 860-960 MHz with RG 58 cable
- E 3-watt AMPS Motorola transceiver kit model MOT S-8955B (or equal) with voice communication option.
  - 1. Contents;
    - SUN-3204AB Transceiver
    - SCN-4057AB Handset
    - SLN-6096A Transceiver Mounting Bracket
    - SKN-4466 Power Cord, 16 ft
    - SKN-4467 Data Cable, 16 ft
    - SKN-4468A Fuse Kit
    - SLN-9556A Hang-up Cup
- F Data transmission;
  - 1. Analog
  - 2. Tri-mode, analog, digital, PCS
  - 3. Radio frequency download with 2500 ft radius communication peripheral capability.
- G On board central processing unit and open-end modular technology for future enhancement.
- H Garmin or equal global positioning antenna.
  - !. Garmin model GPS-35 HVS global positioning system or equal, resolvable to 15 feet horizontal.
- N Text reporting of highway or street 100-block location.
- O Communication equipment: See 2.1-E .
- P Unit controlled voice communication
- Q Voice communication time control

## **2.2 HOST INTERFACE UNIT**

### **A. Integral analog AMPS 102-270 band FSK custom modem.**

1. Data transmission by commercial analog cellular network.
2. Third party data transmission center operation is not acceptable
3. Direct AVL to Host communication
4. 60 second vehicle interface

## **2.3 COMMUNICATION**

### **A Text Messaging**

1. Flat dark matte finish
2. 3/8" high character vacuum fluorescent characters.
3. Fully variable character luminance from off to full brightness.
4. 2-line 80-character display.
5. 50 user-defined programmable messages of 16 characters.
6. DB-9 external serial input/output cable.
7. 12-volt DC negative ground external power.
8. 52 button full alphanumeric keyboard.
9. 32 incoming storage
10. .Functionality capabilities:
  - \* Incident reporting.
  - \* Broadcast messaging.
  - \* Dispatch and driver text messaging.
  - \* Mile post referencing.
  - \* Tort liability archiving.
  - \* Work status reporting.
  - Arrival / departure notices.
  - Dispatch receipt to location verification

### **B Voice Communication**

1. Voice Handset Model Motorola # SCN-4057AB or equal
2. Hands Free Motorola # SMN-4020A or equal

## **2.4 BASE STATION / COMMUNICATIONS CENTER**

- A Fully functional software.
- B Point of interest reporting.
- C Minimum movement field.
- D Flagged reference points.
- E Computer breadcrumb route reference display showing underlying improved road grid.
- F Text reporting of highway or street 100-block location.
- G Multiple location attempts if vehicle missed.
- H Time of Arrival estimate
- I Downloads random or scheduled
- J UDOT supplied computer system.
- K Dispatch system, including street mapping, custom cabling, power supply, and
- L RF base station antenna
- M Vehicle monitoring by 720 time frames one minute capable
- N Vehicle data download on command. Data retention when outside cellular (analog) coverage.
- O PC or network based functionality
- P Data retention in base hard drive
- Q Data archiving for any specified time frame
- R Hard wired based mapping

## **2.5 UPGRADES**

- A Supplier upgrades software and firmware for twelve months following final acceptance. Upgrades may be performed by supplier personnel on-site or by providing upgrade packages and instructions for UDOT installation.
- B System software upgrades to be included in annual upgrade/maintenance.

## **PART 3 EXECUTION**

### **3.1 DELIVERY**

- A Deliver materials as a unit to Region 3 headquarters, 658 N 1500 West, Orem, UT Attn: Steve Acerson,

### **3.2 COMMISSIONING / INITIAL SETUP / TRAINING**

- A Supplier installs equipment at UDOT designated locations.
- B UDOT will provide garage space with 120-volt AC power at the three maintenance stations or Region 3 headquarters, 658 N 1500 West, Orem UT 84057.
- C Supplier provides one half-day training and orientation sessions at each location with qualified technical support technician.
- D Supplier provides one half-day follow-up equipment shakedown and problem solving session at each site within thirty days of initial installation.
- E Supplier provides user manuals, technical data sheets, third party warranties and training CD'S..

### **3.3 WARRANTY**

- A Supplier warrants materials, equipment, software, and installation against defects in workmanship, latent defects, and functionality for a period of one calendar year from the date of final acceptance. Warranty includes replacement or repair parts and labor. Replacement parts will be unused. Warranty repairs are made at UDOT designated locations.
- B Supplier provides telephone technical support during business hours at the supplier's support site. Provide two after-hours telephone numbers for emergency use.

**END OF SECTION**